

JAPANESE PATENT OFFICE
PATENT JOURNAL (A)
KOKAI PATENT APPLICATION NO. HEI 5[1993]-64840

Int. Cl. ⁵ :	B 29 C 59/00 A 43 B 19/22 B 29 C 59/02 B 32 B 3/30 27/02
Sequence Nos. for Office Use:	9156-4F 6617-4F 7717-4F
Filing No.:	Hei 3[1991]-305752
Filing Date:	September 6, 1991
Publication Date:	March 19, 1993
No. of Claims:	4 (Total of 7 pages)
Examination Request:	Not filed

EMBOSSSED SHEET, MANUFACTURING METHOD OF SAME, AND SOLE USING SAME

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[There are no amendments to this patent.]

Claims

1. A type of embossed sheet characterized by the following facts: by means of an ink made of a thermosetting resin, an embossment pattern is printed on a nonwoven fabric sheet made of fibers of a thermoplastic resin so that said slip-preventing projections are formed corresponding to said embossment pattern portions; for the portion outside said embossment pattern, the nonwoven fabric is thermally fused to form a thin film as the solid film portion.

2. A method for manufacturing an embossed sheet characterized by the following facts: by means of an ink made of a thermosetting resin, an appropriate embossment pattern is printed on a nonwoven fabric sheet made of fibers of a thermoplastic resin; the nonwoven fabric sheet is then sandwiched between a pair of upper/lower molds, with the embossment pattern facing the recessed portions formed in one of said pair of upper/lower molds; in this state, the nonwoven fabric sheet is heated and pressed so as to cure said ink that forms the embossment pattern, and, at the same time, the nonwoven fabric sheet sandwiched between the flat portion of said pair of molds is transformed into a solid film.

3. The method for manufacturing the embossed sheet described in Claim 2 characterized by the following facts: said nonwoven fabric sheet made of fibers of a thermoplastic resin and said ink made of a thermosetting resin are respectively prepared from polyurethane-based compositions; and said embossment pattern is a pattern of slip-preventing projections on the sole.

4. A type of sole characterized by the following facts: the sole is prepared by coating an after-sole with embossed projections formed on a mid-sole; a nonwoven fabric sheet made of fibers of a thermoplastic resin is thermally fused on said after-sole to form a thin-layer solid film; then, slip-preventing projections are formed on its surface by curing an ink made of a thermosetting resin.